

## AMENDMENT

What is claimed is:

1. **(Previously Presented)** An emulsified composition comprising a major amount of water in the range of about 99% to about 5% by weight of the emulsified composition, a minor amount of an oil in the range of about 1% to about 95% by weight of the emulsified composition, at least one thickener, at least one of water soluble additives, oil soluble additives, alcohols, solid additives and combinations thereof, and a minor but effective amount of emulsifier to emulsify the aqueous and organic phase resulting in a water in oil emulsified composition wherein the emulsifier comprises one or more surfactants, wherein the emulsifier has a hydrophilic lipophilic balance (HLB) less than 9, and wherein the one or more surfactants that make up the emulsifier are selected from the group consisting of:

(i) a oil soluble product made by reacting at least one hydrocarbyl-substituted carboxylic acid acylating agent with ammonia or an amine, the hydrocarbyl substituent of said acylating agent having about 50 to about 500 carbon atoms;

(ii) any other acylating agent having at least one hydrocarbyl substituents of up to about 40 carbon atoms, and reacting that said acylating agent with ammonia or an amine;

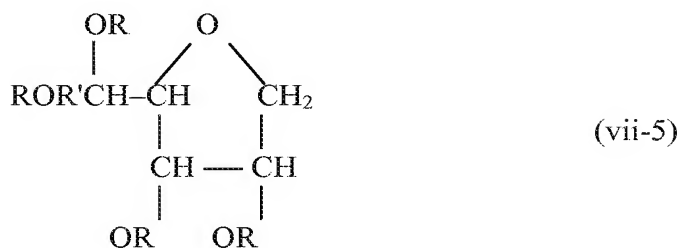
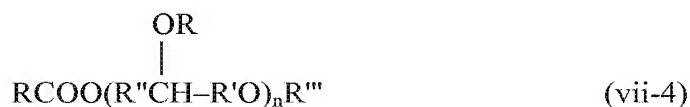
(iii) any other ionic or a nonionic compound having a hydrophilic-lipophilic balance (HLB) of about 1 to about 40;

(iv) the reaction product of polyacidic polymer with at least one oil soluble product made by reacting at least one hydrocarbyl-substituted carboxylic acid acylating agent with ammonia, an amine, a polyamine, an alkanol amine or hydroxy amines;

(v) an amino alkylphenol which is made by reacting an alkylphenol, an aldehyde and an amine resulting in an amino alkylphenol;

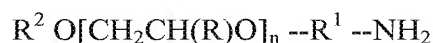
(vi) a hydrocarbyl substituted carboxylic acid, or a reaction product of the hydrocarbyl substituted carboxylic acid or a reactive equivalent of such acid with an alcohol, the hydrocarbyl substituent of the acid or reactive equivalent thereof containing at least about 30 carbon atoms;

(vii) at least one compound represented by one or more of the formulae:

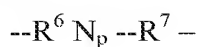


wherein each R is a hydrocarbyl group of up to about 60 carbon atoms; each R' and R'' is independently an alkylene group of 1 to about 20 carbon atoms; each R''' is independently hydrogen, or an acyl or hydrocarbyl group of up to about 30 carbon atoms; n is a number in the range of zero to about 50; and x, y and z are independently numbers in the range of zero to about 50 with the total for x, y and z being at least 1;

(viii) an etheramine used to make the composition of this invention can be represented by the formula



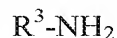
wherein each n is a number from 0 to 50; each R is selected from the group consisting of hydrogen, hydrocarbyl groups of 1 to 16 carbon atoms, and mixtures thereof; each R<sup>1</sup> is selected from the group consisting of a hydrocarbylene group containing 2 to 18 carbon atoms and a group represented by the formula



wherein both R<sup>6</sup> and R<sup>7</sup> are hydrocarbylene groups of 3 to 10 carbon atoms and p is a number from 1 to 4; and each R<sup>2</sup> is a hydrocarbyl group having a valence of Y where Y is a number

from 1 to 3, and containing 1 to 50 carbon atoms when Y is 1 and 1 to 18 carbon atoms when Y is 2 or 3; provided that when n is zero, Y is 1;

- (ix) a phospholipid, any lipid containing a phosphoric acid;
- (x) an amine represented by the formula:



where  $R^3$  = a poly(isobutenyl) group of molecular weight between 350 and 3000, and

- (xi) a combination of any other above listed surfactants;

wherein the emulsified composition has a viscosity in the range of about 200 to about 2,000,000 cPs measured on a Brookfield Viscometer with a No. 7 spindle at 20 rpm at 25°C; and wherein the oil comprises natural oils, synthetic oils, alkylene oxide polymers, esters of dicarboxylic acids, unrefined oils, refined oils, re-refined oils, waxes, oil of lubricating viscosity or combinations thereof,

wherein the oil soluble additives are selected from the group consisting of extreme pressure anti-wear additives, metal deactivators, dispersants, antifoams, corrosion rust inhibitors, antioxidants, detergents, polymers, viscosity modifier, functionalized polymers and combinations thereof,

wherein the antioxidants comprised of phenate sulfides, phosphosulfurized terpenes, sulfurized esters, aromatic amines, hindered phenols or combinations thereof and wherein the antioxidants are present in the range of about 0% to about 10% by weight of the emulsified composition.

2. **(Canceled)**

3. **(Canceled)**

4. **(Canceled)**

5. **(Currently Amended)** The composition of ~~claim 2~~ claim 1 wherein the water soluble additives are selected from the group consisting of at least one of alcohols; extreme pressure anti-wear additives; water soluble salts, selected from the group consisting of dihydrogen butyl phosphate, water soluble dithiophosphate salts and combinations thereof; water soluble inorganic salts selected from the group consisting of xanthates, dithiocarbonates, trithiocarbonates, sulfates, sulfites, sulfides and combinations thereof; water soluble phosphate esters, phosphites, phosphonates, dithiophosphate esters; water soluble rust inhibitors selected from the group consisting of morpholine and alkanolamines, phosphorous and phosphoric acid derivatives including mono and diesters and amine or metallic salts of phosphoric and phosphorous acid, thickeners and combinations thereof and wherein the water soluble additives are present in the range of about 0% to about 50% by weight of emulsified

composition and the oil soluble additives are present in the range of about 0% to about 75% by weight of the emulsified composition.

6. **(Canceled)**

7. **(Canceled)**

8. **(Previously Presented)** The composition of claim 1 wherein the metal deactivators comprise benzotriazole, benzimidazole, 2-alkyldithiobenzimidazoles, 2-alkyldithiobenzothiazoles, 2-(N,N-dialkyldithiocarbamoyl)benzothiazoles, 2,5-bis(alkyldithio)-1,3,4-thiadiazoles, 2,5-bis(N,N-dialkyldithiocarbamoyl)-1,3,4-thiadiazoles or combinations thereof and wherein the metal deactivators are be present in the range of 0% to about 5% by weight of the emulsified composition.

9. **(Previously Presented)** The composition of claim 1 wherein the oil soluble additives comprise oil soluble detergents wherein the oil soluble detergents comprise overbased materials prepared by reacting an acidic material with a mixture comprising an acidic organic compound, a reaction medium comprising at least one inert, organic solvent for the acidic organic material, a stoichiometric excess of a metal base, and a promoter and wherein the detergent is present in the range of about 0% to about 8% by weight of the emulsified composition.

10. **(Previously Presented)** The composition of claim 1 wherein the antifoams comprise organic silicones, dimethyl silicone or combinations thereof and where the antifoams are present in the range of about 0% to about 2% by weight of the emulsified composition.

11. **(Previously Presented)** The composition of claim 1 wherein the antirust compounds comprise alkyl substituted aliphatic dicarboylic acids, alkenyl acids, succinic acids, sulfonates relating to the metal detergent, sodium nitrite, calcium salts of oxidized paraffin wax, magnesium salts of oxidized paraffin wax, alkali metal salts, alkaline earth metal salts or amine salts of beef tallow fatty acids, alkenyl succinates or alkenyl succinic acid half esters, glycerol monoesters, nonylphenyl ethoxylate, lanolin fatty acid esters, calcium salts of lanolin fatty acids, or combinations thereof and wherein the antirust compound is present in the range of about 0% to about 10% by weight of the emulsified composition.

12. **(Canceled)**

13. **(Canceled)**

14. **(Canceled)**

15. **(Original)** The composition of claim 1 wherein the emulsifier comprises a mixture of the reaction product of a fatty acid with an alkanol amine; and the reaction product of a polyisobutene substituted succinic acid or anhydride with an alkanol amine or an alkylene polyamine, the polyisobutene substituent having a number average molecular weight of about 300 to about 3000.

16. **(Previously Presented)** The composition of claim 1 wherein the emulsifier comprises a polyisobutene substituted succinic acid and wherein the oil comprises an oil of lubricating viscosity.

17. **(Previously Presented)** The composition of claim 1 wherein the emulsifier comprises a polyisobutene substituted succinic acid, wherein the polyisobutene has a number average molecular weight of 2300.

18. **(Canceled)**

19. **(Previously Presented)** The composition of claim 1 wherein the emulsifier is present in the range of about 20% to about 0.25% by weight of the emulsified composition.

20. **(Canceled)**

21. **(Canceled)**

22. **(Currently Amended)** A process to produce an emulsified composition comprising:

A. mixing the following components

- (a) a major amount of water,
- (b) a minor amount of an oil,
- (c) an emulsifier, wherein the emulsifier comprises one or more

surfactants, and wherein the emulsifier has an overall hydrophilic lipophilic balance (HLB) of less than 9,

- (d) optionally, one or more water soluble additives,
- (e) optionally, one or more oil soluble additives,
- (f) optionally, one or more alcohols,
- (g) one or more thickeners, or
- (h) combination thereof;

B. with sufficient shear to form a water in oil emulsified composition,

wherein the temperature is in the range of ambient temperature to about 200°C, and the pressure is in the range of about atmosphere pressure to about 20,000 psi; and

wherein the one or more surfactants that make up the emulsifier are selected from the group consisting of:

(i) a oil soluble product made by reacting at least one hydrocarbyl-substituted carboxylic acid acylating agent with ammonia or an amine, the hydrocarbyl substituent of said acylating agent having about 50 to about 500 carbon atoms;

(ii) any other acylating agent having at least one hydrocarbyl substituents of up to about 40 carbon atoms, and reacting that said acylating agent with ammonia or an amine;

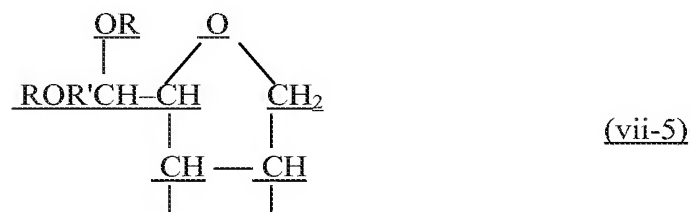
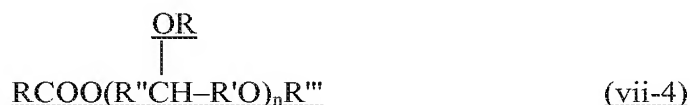
(iii) any other ionic or a nonionic compound having a hydrophilic-lipophilic balance (HLB) of about 1 to about 40;

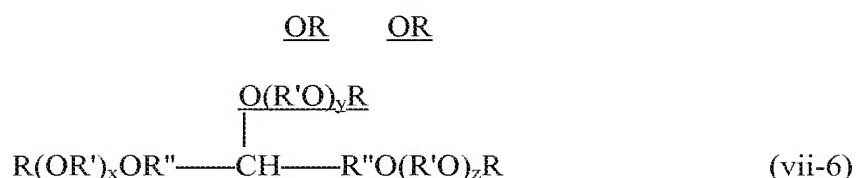
(iv) the reaction product of polyacidic polymer with at least one oil soluble product made by reacting at least one hydrocarbyl-substituted carboxylic acid acylating agent with ammonia, an amine, a polyamine, an alkanol amine or hydroxy amines;

(v) an amino alkylphenol which is made by reacting an alkylphenol, an aldehyde and an amine resulting in an amino alkylphenol;

(vi) a hydrocarbyl substituted carboxylic acid, or a reaction product of the hydrocarbyl substituted carboxylic acid or a reactive equivalent of such acid with an alcohol, the hydrocarbyl substituent of the acid or reactive equivalent thereof containing at least about 30 carbon atoms;

(vii) at least one compound represented by one or more of the formulae:



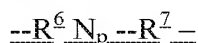


wherein each R is a hydrocarbyl group of up to about 60 carbon atoms; each R' and R'' is independently an alkylene group of 1 to about 20 carbon atoms; each R''' is independently hydrogen, or an acyl or hydrocarbyl group of up to about 30 carbon atoms; n is a number in the range of zero to about 50; and x, y and z are independently numbers in the range of zero to about 50 with the total for x, y and z being at least 1;

(viii) an etheramine used to make the composition of this invention can be represented by the formula



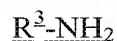
wherein each n is a number from 0 to 50; each R is selected from the group consisting of hydrogen, hydrocarbyl groups of 1 to 16 carbon atoms, and mixtures thereof; each R<sup>1</sup> is selected from the group consisting of a hydrocarbylene group containing 2 to 18 carbon atoms and a group represented by the formula



wherein both R<sup>6</sup> and R<sup>7</sup> are hydrocarbylene groups of 3 to 10 carbon atoms and p is a number from 1 to 4; and each R<sup>2</sup> is a hydrocarbyl group having a valence of Y where Y is a number from 1 to 3, and containing 1 to 50 carbon atoms when Y is 1 and 1 to 18 carbon atoms when Y is 2 or 3; provided that when n is zero, Y is 1;

(ix) a phospholipid, any lipid containing a phosphoric acid;

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where R<sup>3</sup> = a poly(isobutenyl) group of molecular weight between 350 and 3000, and

(xi) a combination of any other above listed surfactants.

23. **(Canceled)**

24. **(Canceled)**

25. **(Canceled)**